

Designing Craters: Creating a Deep Impact

Report to the Deep Impact Team

STUDENT FORM PART 1

REQUIREMENTS & LIMITING FACTORS:

Desired Crater Diameter: 200 m
Desired Crater Depth: 50 m
Upper Mass Limit on Impactor: 500 kg
Upper Limit on Impactor Volume: 1 m³
Target: Comet Tempel 1

Name:

School:

Teacher:

Date:

1. Look back at your answers to questions #3 and #4 on "Looking for Patterns and Making Predictions, Part 2". What did you recommend for the mass and velocity of the impactor?
2. Looking through the information you have collected about comets on your "Comet Research" handout, what do we know about the composition of comets? (Of what are they made?)
3. In what ways do you think cratering on the comet will be different from the cratering experiments conducted in the classroom that influenced your recommendations in question 1?

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